Remarks

Claims 141-146, 148, 150-168, 170-175, 179, and181-208 are pending in the present application. Claims 1-140, 147, 149, 169, 176-178, and 180, have previously been cancelled without prejudice or disclaimer. Claims 181, 195 and 204 have been amended.

The specification has been amended to include the generic meaning of the goods represented by the trademarked term "Lipofundin™ 10%." Specifically, in the paragraph beginning on page 12, line 23, of the present specification the term "Lipofundin™ 10%" is now described as follows:

> ....Lipofundin™ 10%, (a lipid mixture having: 5% soya oil, 5% medium chain triglycerides, 2.5% glycerol, and 1.2% egg lecithin)....

As described in MPEP § 608.01(v), "Where the identification of a trademark is introduced by amendment, it must be restricted to the characteristics of the product known at the time the application was filed to avoid any question of new matter."

Applicants respectfully submit that, at the time the present application was filed, a skilled artisan would have known that Lipofundin™ 10% is a lipid mixture having: 5% soya oil, 5% medium chain triglycerides, 2.5% glycerol, and 1.2% egg lecithin. As evidence of the aforementioned, Applicants submit Attachment A herewith. Attachment A is a copy of the first page a facsimile transmission of a manufacturer's pamphlet describing Lipofundin™, which was published prior to the filing date of the present application. As is evident on Attachment A, the original facsimile transmission of the product pamphlet occurred on July 31,

1996. Additionally, Applicants respectfully remind the Examiner that the same product pamphlet was submitted on ***April 18, 2001*** responsive to the Official Action dated January 1, 2001. Accordingly, Applicants submit that ***the amendment to the specification is not new matter***.

Claims 181, 195 and 204 have been amended to incorporate the generic meanings of the terms "Lipofundin®" and "Intralipid®." Specifically, in claims 181, 195 and 204, the phrase "Lipofundin®" has been deleted without prejudice or disclaimer and replaced with the phrase "a lipid mixture having 5% soya oil, 5% medium chain triglycerides, 2.5% glycerol, and 1.2% egg lecithin." Likewise, the term "Intralipid®" has been deleted without prejudice or disclaimer and replaced with the phrase "a lipid mixture having 10% soybean oil, 1.2% egg phospholipids, and 2.2% glycerol." Support for the amendments to claims 181, 195, and 204 can be found, for example, at page 11, lines 17-19 and in the paragraph beginning on page 12, line 23 of the specification as originally filed.

No new matter has been added.

In view of the remarks set forth herein, further and favorable consideration is respectfully requested.

I. At page 2 of the Official Action, claims 195, 203 and 204 have been rejected under 35 USC § 112, second paragraph.

The Examiner asserts that claims 195, 203 and 204 are indefinite for reciting the trademarks Lipofundin® and Intralipid®.

In view of the following, this rejection is respectfully traversed.

From the outset, Applicants note that claim 203 does not recite either Lipofundin® or Intralipid®. In this regard, it appears the Examiner had intended to reject claim 181 rather than claim 203.

Applicants respectfully submit that claims 181, 195 and 204 have been amended to incorporate the generic meanings of the terms "Lipofundin®" and "Intralipid®." Specifically, in claims 181, 195 and 204, the term "Lipofundin®" has been deleted without prejudice or disclaimer and replaced with the phrase "a lipid mixture having 5% soya oil, 5% medium chain triglycerides, 2.5% glycerol, and 1.2% egg lecithin." Likewise, the term "Intralipid®" has been deleted without prejudice or disclaimer and replaced with the phrase "a lipid mixture having 10% soybean oil, 1.2% egg phospholipids, and 2.2% glycerol."

Applicants respectfully submit that, at the time the present application was filed, a skilled artisan would have known that Lipofundin™ 10% is a lipid mixture having: 5% soya oil, 5% medium chain triglycerides, 2.5% glycerol, and 1.2% egg lecithin. Additionally, Applicants respectfully submit that a skilled artisan would have known that the Intralipid™ 10% is a lipid mixture lipid mixture having 10% soybean oil, 1.2% egg phospholipids, and 2.2% glycerol.

As evidence of the aforementioned, Applicants submit Attachments A and B herewith. Attachment A is a copy of the first page a facsimile transmission of a manufacturer's pamphlet describing Lipofundin™, which was published prior to the filing date of the present application. As is evident on Attachment A, the original facsimile transmission of the product pamphlet occurred on July 31, 1996. Attachment B is a copy of the first page a facsimile transmission of a manufacturer's pamphlet describing Intralipid™, which was published prior to the filing date of the present application. As is evident on Attachment A, the original facsimile transmission of the product pamphlet occurred on September 18, 1996. Additionally, with regard to the term Intralipid™, Applicants note that page 11, lines 17-19 of the specification as originally filed provides:

> ...10% Intralipid™: 10% soybean oil, 1.2% egg phospholipids, 2.2% glycerol....

Again, Applicants respectfully remind the Examiner that both of the same product pamphlets were submitted on ***April 18, 2001*** responsive to the Official Action dated January 1, 2001.

In view of the above, it is submitted that the claims clear and definite within the meaning of 35 USC § 112, first paragraph. Thus, the Examiner is respectfully requested to withdraw this rejection.

III. At page 3 of the Official Action, claims 141-146, 148, 150-168, 170-175, 179 and 181-208 have been rejected under 35 USC § 112, first paragraph.

The Examiner asserts that the "claim(s) contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention." In particular, the Examiner asserts that the phrases "a reconstituted high density lipoprotein" and "non-cholesterol lipid components...."

In view of the following, this rejection is respectfully traversed.

The test under 35 USC § 112, first paragraph, for determining compliance with the written description requirement is whether the application clearly conveys that an applicant has invented the subject matter which is claimed. *In re Barker*, 194 USPQ 470, 473 (CCPA 1977); MPEP § 2163. Also, the applicant must convey to the public what the applicant claims as the invention so that the public may ascertain if the patent applicant claims anything in common use or already known. MPEP § 2163. Lastly, the specification must convey that the applicant was in possession of the invention. MPEP § 2163. The Examiner is respectfully reminded that the Examiner has the initial burden of presenting evidence or reasons why persons skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the claims. *In re Wertheim*, 191USPQ 90, 98 (CCPA 1976).

As discussed in the Amendment and Response filed on January 28, 2008, the present specification clearly describes a "reconstituted high-density lipoprotein" and "non-cholesterol lipid components..." at page 6, last paragraph, as follows:

> The term *"and* at least one other lipid component of HDL other than cholesterol *and cholesteryl-ester"* refers to glycerides, glycerol and triglycerides. In accordance with the invention glycerides and triglycerides which are not present naturally in HDL, but have an analogous function to glycerides and triglycerides present in HDL may also be used. The composition of matter comprising the non-cholesterol and the non-cholesteryl-ester lipid components of HDL (generally phospholipids, triglycerides and glycerides) is termed *"reconstituted HDL"* (Gillote *et al., J. Biol. Chem.*, **271**:23792-23798, 1996). This term refers to a complex comprising phospholipids, triglycerides and glycerides, which differs from natural HDL by the absence of cholesterol, cholesteryl-esters, and apolipoproteins.

Applicants respectfully note that, at the time the present application was filed, a skilled artisan would fully understand the meanings of each of the phrases "reconstituted high-density lipoprotein" and "non-cholesterol lipid components..." based on the aforementioned passage and the knowledge of the skilled artisan.

However, with regard to the phrase reconstituted high density lipoprotein, in the Official Action, the Examiner indicates that:

> Applicant in his arguments refers to a U.S. Patent and a U.S. Patent application, which use the term reconstituted HDL or r HDL in their claims. Applicant is reminded that the use of such phrases in the claims is permitted considering that the specification provides an adequate written description for such claims. Applicant in his remarks refers to the attached references which describe rHDL. However such references are not of record. *See* the Official Action at page 4.

From the outset Applicants note that the Examiner appears to admit that the meaning of the phrase "reconstituted high density lipoprotein" would be known by a skilled artisan because the Examiner acknowledges that each of US Patent 7,053,049 and US Patent application 2004/0266660 describe "reconstituted high density lipoprotein" ("rHDL"). In this regard, ***Applicants remind the Examiner that there is no requirement to define each and every claim term in a patent application***. Even if such a requirement existed, Applicants submit that the present specification describes rHDL sufficiently to meet the requirements of 35 USC § 112, first paragraph.

In addition, the Examiner's indication that references discussed in the Amendment and Response filed January 23, 2008 also appears to be in error. In this regard, Applicants note that each of the references described in Applicants Response dated January 23, 2008 have been electronically scanned in by the United States Patent and Trademark Office and are available in the Image File Wrapper on the Private Pair website. Although Applicants understand that the Examiner uses the PALM system rather than the PAIR system, Applicants maintain the position that the references were of record and available to USPTO employees. However, in order to avoid further confusion, Applicants submit herewith, an Information Disclosure Statement citing eleven references which provide evidence that rHDL was well known amongst persons of ordinary skill in the art well in advance to the filing date of the present application.

Among the references cited in the Information Disclosure Statement are: (i) Gillotte et al. 1996 (cited on page 6 of the present specification); (ii) Sakai et al. 1996; (iii) Bijsterbosch et al. 1996; (iv) Bolin and Jonas 1996; (v) Rye et al. 1995; (vi) Parker et al. 1995; and (vii) Bijsterbosch et al. 1994. Each of the cited references are replete with description of rHDL. Accordingly, as discussed in the Amendment and Response filed on January 23, 2008, the present specification as well as the foregoing references, evidence that the term "reconstituted high-density lipoprotein" is well-established and readily understood by one of ordinary skill in the art to which the present invention pertains.

With regard to the phrase "non-cholesterol lipid components...," the Examiner asserts that "the specification describes the phrase as written in the claims, without describing a representative number of non-cholesterol lipid components." However, Applicants note that the speciation clearly provides that:

> The present invention is based on the surprising finding that high density lipoprotein (HDL), or a combination of its non-cholesterol lipid constituents (phospholipids, and other lipids such as triglycerides and glycerol), which are capable of forming reconstituted HDL, promotes normal healing and regeneration of damaged eye epithelium. *See* the present specification at the Summary of the Invention.

Applicants respectfully submit a skilled artisan would know fully understand the meaning of the phrase "a non-cholesterol lipid component in view of the plain text in the specification. In this regard, Applicants respectfully submit that based on the text of the specification alone, a skilled artisan would understand that "a non-cholesterol lipid component" comprises ***at least a combination of phosopholipids, and other lipids such as triglycerides,***

glycerol and sphingolipids. Citing MPEP § 2163, the Examiner indicates that Applicants have not provided a sufficient number of species to reflect the genus; however, Applicants respectfully submit that species disclosed are more than satisfactory to provide a skilled artisan with an understanding of the phrase "a non-cholesterol lipid component...." However, the Examiner is additionally invited to review the references cited in the Information Disclosure Statement submitted herewith for additional references to non-cholesterol lipid components, including, for example, phosopholipids, triglycerides, glycerol and sphingolipids.

In view of the above, it is submitted that the claims are described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention, within the meaning of 35 USC § 112, first paragraph. Thus, the Examiner is respectfully requested to withdraw this rejection.

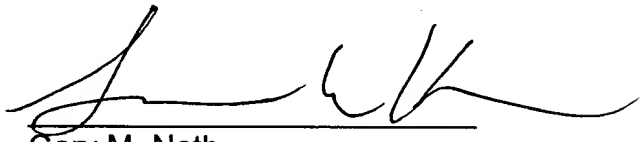
Conclusion

In view of the remarks set forth herein, Applicant submits that the pending claims are in condition for immediate allowance. The Examiner is invited to contact the undersigned attorney if it is believed that such contact will expedite the prosecution of the application.

In the event this paper is not timely filed, Applicants petition for an appropriate extension of time. Please charge any fee deficiency or credit any overpayment to Deposit Account No. 14-0112.

Respectfully submitted,

THE NATH LAW GROUP



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ATTACHMENT A

Original Transmission Date

1222369/7

Directions for use
B. Braun Melsungen AG · D-34209 Melsungen

Lipofundin® MCT/LCT 10% and 20%

Composition
1000 ml emulsion contain

Active ingredients	Lipofundin® MCT/LCT 10 %	Lipofundin® MCT/LCT 20 %
Soya oil	50.0 g	100.0 g
Medium-chain triglycerides	50.0 g	100.0 g
Glycerol	25.0 g	25.0 g
Egg Lecithin	12.0 g	12.0 g
Excipients		
Sodium Oleate, Water for injections		
Megajoules/l (approx.):	4.63 (1058 kcal)	7.99 (1908 kcal)
Milliosmols/l (approx.):	345	380
pH:	6.5–8.5	6.5–8.5

Pharmaceutical form
Emulsion for intravenous infusion in glass bottles; contents: 100 ml, 250 ml, 500 ml

Pharmaco-therapeutic group
Fat emulsion for provision of calories and essential fatty acids.

Indications
Lipofundin® MCT/LCT is indicated as a source of calories and essential fatty acids for patients requiring parenteral nutrition.

Contraindications
The administration of Lipofundin® MCT/LCT is contra-indicated in patients demonstrating disturbances in normal fat metabolism such as pathologic hyperlipaemia, lipoid nephrosis, in acute pancreatitis if accompanied by hyperlipaemia. It is further contra-indicated in patients with ketoacidosis or hypoxia, in thromboembolism and in acute shock states.

Precautions for use
Caution should be exercised in administering intravenous fat emulsions in patients with metabolic acidosis, severe liver damage, pulmonary disease, sepsis, diseases of the reticuloendothelial system, anaemia or blood coagulation disorders or when there is danger of fat embolism.

ATTACHMENT B

Intralipid™ 10% and 20%

Fat emulsion for intravenous nutrition.

Description

Intralipid™ is a sterile non-pyrogenic fat emulsion for intravenous infusion as a source of energy and essential fatty acids. Intralipid contains purified soybean oil emulsified with purified egg phospholipids.

The soybean oil consists of a mixture of triglycerides of predominantly polyunsaturated fatty acids. Egg phospholipids are isolated from the egg yolk. The lipid globule size and the biological properties of Intralipid are similar to those of chylomicrons.

Composition

Content (per 1000 ml)	Intralipid™ 10%	Intralipid™ 20%
Soybean oil	100 g	200 g
Egg phospholipids	12 g	12 g
Glycerol anhydrous	22.0 g	22.0 g
Water for injections	to 1000 ml	to 1000 ml
pH, approx.	8	8
Osmolality (mosm/kg water)	300	350
Energy content, kcal/ml, (kJ/ml)	1.1 (4.6)	2.0 (8.4)

Clinical pharmacology

Intralipid is eliminated from the circulation via the same metabolic pathway as chylomicrons and is utilized as a source of energy. Intralipid prevents essential fatty acid deficiency (EFAD) and corrects the clinical manifestations of EFAD.

Indications

Intralipid should be used to supply energy and essential fatty acids to patients needing intravenous nutrition. Intralipid is also indicated for patients with essential fatty acid deficiency who cannot maintain or restore a normal essential fatty acid pattern by oral intake.

Contraindications

Intralipid is contraindicated in patients with acute shock and those with severe disturbances in lipid metabolism such as pathologic hyperlipemia.

Caution

Intralipid should be given with caution in conditions of impaired lipid metabolism as in renal insufficiency, uncompensated diabetes mellitus, pancreatitis, impaired liver function, hypothyroidism (if hypertriglyceridemic) and sepsis. If Intralipid is given to patients with these conditions, close monitoring of the serum triglyceride concentration is obligatory.

Patients known to be allergic to soy protein, should be given Intralipid with great caution and only after hypersensitivity tests.

Intralipid should be given with caution to neonates and prematures with hyperbilirubinemia and in cases with suspected pulmonary hypertension. In neonates, particularly prematures on long term parenteral nutrition, platelet count, liver test and serum triglyceride concentration should be monitored.

Intralipid may interfere with certain laboratory measurements (bilirubin, lactate dehydrogenase, oxygensaturation, Hb etc) if blood is sampled before fat is been adequately cleared from the bloodstream. Fat is clear after a fat free interval of 5 – 6 hours in most patients.

Pregnancy. Successful and safe administration of Intralipid during pregnancy in the human has been reported. Animal reproduction studies have not been carried out with Intralipid.

Adverse events

Intralipid infusion may cause a rise in body temperature (incidence ≥3%) and, less frequent, shivering, chills and nausea/vomiting (incidence <1%).

Reports of other adverse events in conjunction with Intralipid infusion are extremely rare, less than one report of a certain event per one million infusions.

Immediate or early adverse events. Hypersensitivity reactions (anaphylactic reaction, skin rash, urticaria), respiratory symptoms (e.g. tachypnoea) and circulatory effects (e.g. hyper/hypotension) have been described. Hemolysis, reticulocytosis, abdominal pain, headache, rigors and priapism have been reported.

Delayed adverse events. Thrombocytopenia has been reported in association with prolonged treatment with Intralipid in infants. Transient increase in liver tests after prolonged intravenous nutrition with or without Intralipid have also been noted.

Impaired capacity to eliminate Intralipid may lead to fat overload syndrome as a result of overdosage also at recommended rates of infusion in association with a sudden change in the clinical condition such as renal function impairment or infection. Fat overload syndrome is characterized by hyperlipaemia, fever, fat infiltration and disorders in various organs and coma. All symptoms are usually reversible if the infusion of Intralipid is discontinued.

Dosage and administration

The ability to eliminate Intralipid should govern the dosage and infusion rate. See Fat elimination.

Adults. The recommended maximum dosage is 3 g triglycerides/kg body weight/day. Intralipid can supply up to 70% of the energy requirements, also in patients with highly increased energy requirements. The infusion rate for Intralipid 10% or 20% should not exceed 500 ml/4 hours.

Neonates and infants. The recommended dosage range in neonates and infants is 0.5 – 4 g triglycerides/kg/day. The rate of infusion should not exceed 0.1 g triglycerides/kg/hour (4 g/kg in 24 hours). In premature and low birthweight neonates, Intralipid should preferably be used continuously over 24 hours. The initial dosage of 0.5 - g/kg/day may be increased by 0.5 – 1 g/kg/day up to 2 g/kg/day. Only with close monitoring of serum TG concentration, liver tests, and oxygen saturation may the dosage be increased to 4 g/kg/day. No attempt should be made to exceed these in order to compensate for missed doses.

Essential fatty acid deficiency. To prevent or correct essential fatty acid deficiency, 4 – 8% of non-protein energy should be supplied as Intralipid to provide sufficient amounts of linoleic and linolenic acids. When EFA is associated with stress, the amount of Intralipid needed to treat the deficiency may be substantially increased.